WHAT IS CLAIMED IS:

1. A method of treating or preventing a type of cancer, comprising

administering to a subject in need of such treatment or prevention a composition comprising a population of complexes, said complexes comprising (a) heat shock protein and/or alpha-2-macroglobulin, and (b) antigenic proteins wherein said population of complexes were produced by complexing heat shock protein or alpha-2-macroglobulin to (i) antigenic proteins that are at least 50% of the different proteins present in the cells of said type of cancer, or (ii) at least 50 different proteins present in the cells of said type of cancer; and

administering to said subject at least one treatment modality that does not comprise a heat shock protein or alpha-2-macroglobulin.

2. A method of treating or preventing a type of cancer, comprising

administering to a subject in need of such treatment or prevention a composition comprising a population of complexes, said complexes comprising (a) heat shock protein and/or alpha-2-macroglobulin, and (b) antigenic peptides wherein said population of complexes were produced by a method comprising digesting a protein preparation comprising (i) at least 50% of the different proteins present in cells of said type of cancer or (ii) at least 50 different proteins present in cells of said type of cancer with one or more proteases to produce a population of antigenic peptides, and complexing the population of antigenic peptides to heat shock protein or alpha-2-macroglobulin; and

administering to said subject at least one treatment modality that does not comprise a heat shock protein or alpha-2-macroglobulin.

3. A method of treating or preventing a type of cancer, comprising

administering to a subject in need of such treatment or prevention a composition comprising a population of complexes, said complexes comprising (i) heat shock protein and/or alpha-2-macroglobulin and (ii) antigenic peptides wherein said population of complexes were produced by a method comprising (a) exposing a protein preparation comprising (A) at least 50% of the different proteins present in cells of said type of cancer or (B) at least 50 different proteins present in cells of said type of cancer to ATP, guanidium hydrochloride, and/or acidic conditions, to produce a population of antigenic peptides; (b) recovering the population of antigenic peptides; and (c) complexing the population of antigenic peptides to heat shock protein or alpha-2-macroglobulin; and

administering to said subject at least one treatment modality that does not comprise a heat shock protein or alpha-2-macroglobulin.

4. A method of treating or preventing a type of infectious disease, comprising

administering to a subject in need of such treatment or prevention a composition comprising a population of complexes, said complexes comprising (a) heat shock protein and/or alpha-2-macroglobulin, and (b) antigenic proteins wherein said population of complexes were produced by complexing heat shock protein or alpha-2-macroglobulin to antigenic proteins that are at least 50% of the different proteins or at least 50 different proteins present in antigenic cells, a cellular fraction thereof, or viral particles that express an antigenic determinant of an agent that causes the infectious disease; and

administering to said subject at least one treatment modality that does not comprise a heat shock protein or alpha-2-macroglobulin.

5. A method of treating or preventing a type of infectious disease, comprising

administering to a subject in need of such treatment or prevention a composition comprising a population of complexes, said complexes comprising (a) heat shock protein and/or alpha-2-macroglobulin, and (b) antigenic peptides wherein said population of complexes were produced by a method comprising (i) digesting a protein preparation comprising at least 50% of the different proteins or at least 50 different proteins present in antigenic cells, a cellular fraction thereof or viral particles that express an antigenic determinant of an agent that causes the infectious disease with either a protease or a plurality of different proteases; and (ii) complexing the population of antigenic peptides to heat shock protein or alpha-2-macroglobulin; and

administering to said subject at least one treatment modality that does not comprise a heat shock protein or alpha-2-macroglobulin.

6. A method of treating or preventing a type of infectious disease, comprising

administering to a subject in need of such treatment or prevention a composition comprising a population of complexes, said complexes comprising (a) heat shock protein and/or alpha-2-macroglobulin, and (b) antigenic peptides wherein said complexes were produced by a method comprising (i) exposing a protein preparation comprising at least 50% of the different proteins or at least 50 different proteins present in antigenic cells, a cellular fraction thereof, or viral particles that express an antigenic determinant of an agent that

causes the infectious disease to ATP, guanidium hydrochloride, and/or acidic conditions, to produce a population of antigenic peptides; (ii) recovering the population of antigenic peptides; and (iii) complexing the population of antigenic peptides to heat shock protein or alpha-2-macroglobulin; and

administering to said subject at least one treatment modality that does not comprise a heat shock protein or alpha-2-macroglobulin.

7. The method of claim 1 wherein said complexing the population of antigenic proteins to the heat shock proteins is via formation of a covalent bond.

8. The method of claim 1 wherein said complexing the population of antigenic proteins to the heat shock proteins is via formation of a non-covalent bond.

9. The method of claim 2 or 3 wherein said complexing the population of antigenic peptides to the heat shock proteins is via formation of a covalent bond.

10. The method of claim 2 or 3 wherein said complexing the population of antigenic peptides to the heat shock proteins is via formation of a non-covalent bond.

11. The method of claim 4 wherein said complexing the population of antigenic proteins to α-2-macroglobulin is via formation of a covalent bond.

12. The method of claim 4 wherein said complexing the population of antigenic proteins to α-2-macroglobulin is via formation of a non-covalent bond.

13. The method of claim 5 or 6 wherein said complexing the population of antigenic peptides to the α-2-macroglobulin is via formation of a covalent bond.

14. The method of claim 5 or 6 wherein said complexing the population of antigenic peptides to α-2-macroglobulin is via formation of a non-covalent bond.

15. The method of claim 1 wherein said population of complexes comprising heat shock protein and/or alpha-2-macroglobulin, and antigenic proteins is purified.

16. The method of claim 4 wherein said population of complexes is purified.

17. The method of claim 2 or 3 wherein said population of complexes is purified.

18. The method of claim 5 or 6 wherein said population of complexes is purified.

19. The method of claim 1, 2 or 3, wherein the cells of same type of cancer are from a metastasis.

20. The method of claim 1, 2 or 3, wherein the cancer treated or prevented is a metastasis.

21. The method of claim 5, 6 or 7, wherein the antigenic cells are infected by the agent that causes the infectious disease.

22. The method of claim 5, 6 or 7, wherein the antigenic cells are infected by a variant of said agent, that displays antigenicity of said agent.

23. The method of claim 1, 2, or 3 wherein the at least treatment modality comprises a chemotherapeutic agent, an anti-angiogenic agent, a cytokine, a biological response modifier, a hormone, an antibody, a polynucleotide, an immunostimulatory oligonucleotide, a photodynamic therapeutic agent or radiation.

24. The method of claim 4, 5, or 6 wherein the at least one treatment modality comprises an antibiotic, an antiviral, an antiprotozoal compound, an antifungal compound, an antihelminthic compound, an antibody, a cytokine, a hormone, an immunostimulatory oligonucleotide, or a polynucleotide.

25. The method of claim 1, 2, 3, 4, 5, or 6 wherein said composition is administered before, concurrently with, or after administration of the at least one treatment modality.

26. The method of claim 1, 2, 3, 4, 5 or 6 wherein the subject has previously been non-responsive to treatment with said at least one treatment modality in the absence of said composition.

27. The method of claim 1, 2, 3, 4, 5, or 6 wherein said administering of said composition is repeated at weekly intervals.

28. The method of claim 1, 2, 3, 4, 5, or 6 wherein said administering of said composition is repeated at the same site of the subject.

29. The method of claim 1, 2, 3, 4, 5, or 6 wherein said administering of said composition is intradermally or subcutaneously.

30. The method of claim 1, 2, 3, 4, 5, or 6 wherein a sub-optimal amount of said composition is administered.

31. The method of claim 1, 2, 3, 4, 5, or 6 wherein a sub-optimal amount of said at least one treatment modality is administered.

32. The method of claim 1, 2, 3, 4, 5, or 6 wherein the subject is human.

33. The method of claim 1 wherein the antigenic proteins are autologous to the subject.

34. The method of claim 4 wherein the antigenic proteins are autologous to the subject.

35. The method of claim 2 or 3 wherein the antigenic peptides are autologous to the subject.

36. The method of claim 5 or 6 wherein the antigenic peptides are autologous to the subject.

37. A kit comprising

a first container containing a composition comprising a population of complexes, said complexes comprising (a) heat shock protein and/or alpha-2-macroglobulin, and (b) antigenic proteins, wherein said population of complexes were produced by complexing heat shock protein or alpha-2-macroglobulin to antigenic proteins that are at least 50% of the different proteins present in antigenic cells or at least 50 different proteins present in antigenic cells; and

a second container containing a treatment modality that does not comprise heat shock protein or alpha-2-macroglobulin.

38. A kit comprising

a first container containing a composition comprising a population of complexes, said complexes comprising (a) heat shock protein and/or alpha-2-macroglobulin, and (b) antigenic proteins, wherein said population of complexes were produced by a method comprising (i)

digesting a protein preparation comprising at least 50% of the different proteins or at least 50 different proteins present in antigenic cells with one or more proteases to produce a population of antigenic peptides, and (ii) complexing the population of antigenic peptides to heat shock protein or alpha-2-macroglobulin; and

a second container containing a non-heat shock protein and non-alpha-2-macroglobulin-based treatment modality.

39. A kit comprising

a first container containing a composition comprising a population of complexes, said complexes comprising (a) heat shock protein and/or alpha-2-macroglobulin, and (b) antigenic proteins wherein said population of complexes were produced by a method comprising (i) exposing a protein preparation comprising at least 50% of the different proteins or at least 50 different proteins present in antigenic cells to ATP, guanidium hydrochloride, and/or acidic conditions, to produce a population of antigenic peptides; (ii) recovering the population of antigenic peptides; and (iii) complexing the population of antigenic peptides to heat shock protein or alpha-2-macroglobulin; and

a second container containing a non-heat shock protein and non-alpha-2-macroglobulin-based treatment modality.